CITY OF OCALA POLICE OFFICERS' RETIREMENT SYSTEM ACTUARIAL VALUATION AS OF OCTOBER 1, 2023 CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2025





January 31, 2024

Board of Trustees City of Ocala Police Officers' Pension Board

Re: City of Ocala Police Officers' Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Ocala Police Officers' Retirement System. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Chapters 112 and 185, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by the City of Ocala, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

Additionally, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models that apply the funding rules to generate the results. All internally developed models are reviewed as part of the valuation process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

In our opinion, the Minimum Required Contribution set forth in this report constitutes a reasonable actuarially determined contribution under Actuarial Standard of Practice No. 4.

The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Ocala, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police Officers' Retirement System. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By:

Douglas H. Lozen, EA, MAAA Enrolled Actuary #23-7778

By:

Kevin H. Pong, ASA, EA, MAAA Enrolled Actuary #23-7783

DHL/lke

Enclosures

TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	6
	b. Changes Since Prior Valuation	8
	c. Contribution Impact of Annual Changes	9
	d. Comparative Summary of Principal Valuation Results	10
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	16
	b. Detailed Actuarial (Gain)/Loss Analysis	17
	c. History of Funding Progress	18
	d. Actuarial Assumptions and Methods	19
	e. Glossary	23
	f. Discussion of Risk	25
	g. Partial History of Premium Tax Refunds	29
Ш	Trust Fund	30
IV	Member Statistics	
	a. Statistical Data	37
	b. Age and Service Distribution	38
	c. Valuation Participant Reconciliation	39
V	Summary of Current Plan	40

SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Ocala Police Officers' Retirement System, performed as of October 1, 2023, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2025.

The contribution requirements, compared with those set forth in the October 1, 2022 actuarial valuation report, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2023 9/30/2025	10/1/2022 9/30/2024
Minimum Required Contribution % of Projected Annual Payroll	44.36%	40.49%
Member Contributions (Est.) % of Projected Annual Payroll	8.00%	8.00%
City And State Required Contribution % of Projected Annual Payroll	36.36%	32.49%
	20.2070	32,77 /0
State Contribution (Est.) ¹ % of Projected Annual Payroll (Est.)	\$877,590 5.90%	\$877,590 5.90%

¹ Represents the amount received in calendar 2023. Based on the August 22, 2018 Memorandum of Understanding, the City and FOP agreed that no change will be made to the use of Chapter 185 Premium Tax Revenue until the next Collective Bargaining Session. Accordingly, the City has access to all annual State Monies to assist with Plan funding.

² The required contribution from the combination of City and State sources for the year ending September 30, 2025, is 36.36% of the actual payroll realized in that year. As a budgeting tool, the City may contribute 30.46% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received. Please note that a shortfall contribution of \$222,129.95 is due in addition to the above stated requirements for the fiscal year ending September 30, 2024.

As you can see, the Minimum Required Contribution shows an increase when compared to the results set forth in the October 1, 2022 actuarial valuation report. The increase is attributable to net unfavorable actuarial experience described in the next paragraph.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an investment return of 4.18% (Actuarial Asset Basis) which fell short of the 7.25% assumption, an average salary increase of 11.70% which exceeded the 5.46% assumption, and unfavorable turnover experience. There were no significant sources of actuarial gain.

CHANGES SINCE PRIOR VALUATION

Plan Changes

There have been no changes in benefits since the prior valuation.

Actuarial Assumption/Method Changes

There have been no assumption or method changes since the prior valuation.

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2022	27.19%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	-0.60%
Change in Normal Cost Rate	-0.19%
Change in Administrative Expense Percentage	0.04%
Payroll Change Effect on UAAL Amortization	-0.71%
Investment Return (Actuarial Asset Basis)	1.98%
Salary Increases	1.46%
Active Decrements	0.69%
Inactive Mortality	0.23%
UAAL Amortization Impact from Contribution Policy	0.32%
New Entrants	0.08%
Assumption Change	0.00%
Other	<u>-0.03%</u>
Total Change in Contribution	3.27%
(3) Contribution Determined as of October 1, 2023	30.46%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	10/1/2023	10/1/2022
A. Participant Data		
Actives	180	188
Service Retirees	108	106
DROP Retirees	13	10
Beneficiaries	21	22
Disability Retirees	5	4
Terminated Vested	<u>21</u>	<u>22</u>
Total	348	352
Projected Annual Payroll	14,872,559	14,410,018
Annual Rate of Payments to:		
Service Retirees	4,600,453	4,505,260
DROP Retirees	843,199	589,167
Beneficiaries	391,080	430,845
Disability Retirees	120,071	97,422
Terminated Vested	243,440	254,273
B. Assets		
Actuarial Value (AVA) ¹	92,507,219	89,529,768
Market Value (MVA) ¹	83,675,003	77,186,078
C. Liabilities		
Present Value of Benefits Actives		
Retirement Benefits	63,159,477	59,001,391
Disability Benefits	3,133,982	3,115,256
Death Benefits	182,879	176,294
Vested Benefits	4,116,019	3,887,013
Refund of Contributions	919,940	918,334
Service Retirees	49,601,782	48,950,315
DROP Retirees ¹	13,021,089	8,984,003
Beneficiaries	3,170,982	3,466,141
Disability Retirees	1,269,810	998,761
Terminated Vested	2,171,800	2,189,282
Share Plan Balances ¹	2,171,800	2,169,262
Funding Standard Account	0	595,648
i unung standard Account		373,040
Total	140,747,760	132,282,438

C. Liabilities - (Continued)	10/1/2023	10/1/2022
Present Value of Future Salaries	115,770,830	111,071,542
Present Value of Future		
Member Contributions	9,261,666	8,885,723
Normal Cost (Retirement)	1,848,661	1,796,387
Normal Cost (Disability)	201,991	209,918
Normal Cost (Death)	8,533	8,489
Normal Cost (Vesting)	231,366	229,801
Normal Cost (Refunds)	152,988	149,813
Total Normal Cost	2,443,539	2,394,408
Present Value of Future		
Normal Costs	18,384,189	17,760,051
Accrued Liability (Retirement)	48,935,670	45,373,723
Accrued Liability (Disability)	1,587,765	1,545,669
Accrued Liability (Death)	117,663	112,496
Accrued Liability (Vesting)	2,274,788	2,112,846
Accrued Liability (Refunds)	212,222	193,503
Accrued Liability (Inactives) ¹	69,235,463	64,588,502
Share Plan Balances ¹	0	0
Funding Standard Account	0	595,648
Total Actuarial Accrued Liability (EAN AL)	122,363,571	114,522,387
Unfunded Actuarial Accrued		
Liability (UAAL)	29,856,352	24,992,619
Funded Ratio (AVA / EAN AL)	75.6%	78.2%

D. Actuarial Present Value of		
Accrued Benefits	10/1/2023	10/1/2022
Vested Accrued Benefits		
Inactives + Share Plan Balances ¹	69,235,463	64,588,502
Actives	26,035,531	24,218,176
Member Contributions	7,845,243	7,349,815
Total	103,116,237	96,156,493
Non-vested Accrued Benefits	3,464,846	3,510,418
Total Present Value		
Accrued Benefits (PVAB)	106,581,083	99,666,911
Funded Ratio (MVA / PVAB)	78.5%	77.4%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	5,483,796	
Benefits Paid	(5,592,738)	
Interest	7,023,114	
Other	0	
Total	6,914,172	

Valuation Date Applicable to Fiscal Year Ending	10/1/2023 9/30/2025	10/1/2022 9/30/2024
E. Pension Cost		
Normal Cost (with interest) % of Projected Annual Payroll ²	17.03	17.22
Administrative Expenses (with interest) % of Projected Annual Payroll ²	0.68	0.64
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years		
(as of 10/1/2023, with interest) % of Projected Annual Payroll ²	26.65	22.63
Minimum Required Contribution % of Projected Annual Payroll ²	44.36	40.49
Expected Member Contributions % of Projected Annual Payroll ²	8.00	8.00
Expected City and State Contribution % of Projected Annual Payroll ²	36.36	32.49
F. Past Contributions		
Plan Years Ending:	9/30/2023	
City and State Requirement	4,323,638	
Actual Contributions Made:		
City State FSA Application Total	2,850,400 877,590 <u>595,648</u> 4,323,638	
G. Net Actuarial (Gain)/Loss	6,096,822	

 $^{^{\}rm 1}$ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2023 and 9/30/2022.

² Contributions developed as of 10/1/2023 are expressed as a percentage of Projected Annual Payroll at 10/1/2023 of \$14,872,559.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

	Projected Unfunded
Year	Actuarial Accrued Liability
2023	29,856,352
2024	27,918,911
2025	25,841,005
2028	18,658,918
2032	6,407,117
2035	1,776,435
2038	0

I. (i) 5 Year Comparison of Actual and Assumed Salary Increases

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2023	11.70%	5.46%
Year Ended	9/30/2022	19.73%	5.45%
Year Ended	9/30/2021	4.03%	5.44%
Year Ended	9/30/2020	6.65%	5.43%
Year Ended	9/30/2019	6.19%	5.40%

(ii) 5 Year Comparison of Investment Return on Market Value and Actuarial Value

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2023	9.30%	4.18%	7.25%
Year Ended	9/30/2022	-16.74%	2.94%	7.50%
Year Ended	9/30/2021	19.91%	10.26%	7.60%
Year Ended	9/30/2020	9.04%	8.17%	7.70%
Year Ended	9/30/2019	3.14%	5.93%	7.85%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2023	\$14,872,559
	10/1/2013	8,269,526
(b) Total Increase		79.85%
(c) Number of Years		10.00
(1) A 1.D		6.050/
(d) Average Annual Rate		6.05%

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Douglas H. Lozen, EA, MAAA Enrolled Actuary #23-7778

Please let us know when the report is approved by the Board and unless otherwise directed we will provide copies of the report to the following offices to comply with Chapter 112, Florida Statutes:

Mr. Keith Brinkman Bureau of Local Retirement Systems Post Office Box 9000 Tallahassee, FL 32315-9000

Mr. Steve Bardin Municipal Police and Fire Pension Trust Funds Division of Retirement Post Office Box 3010 Tallahassee, FL 32315-3010

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2022				\$24,992,619
(2)	Sponsor Normal C	ost developed as of	f October 1, 2022		1,241,607
(3)	Expected administr	rative expenses for	the year ended Septem	aber 30, 2023	88,993
(4)	Expected interest of	on (1), (2) and (3)			1,905,207
(5)	Sponsor contribution	ons to the System of	during the year ended S	eptember 30, 2023	4,323,638
(6)	Expected interest of	on (5)			145,258
(7)	(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2023 (1)+(2)+(3)+(4)-(5)-(6)				23,759,530
(8)	(8) Change to UAAL due to Assumption Change				0
(9)	(9) Change to UAAL due to Actuarial (Gain)/Loss				6,096,822
(10)	(10) Unfunded Actuarial Accrued Liability as of October 1, 2023				29,856,352
	Type of Base	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2023 <u>Amount</u>	Amortization <u>Amount</u>
Consolidation Base 10/1/2022 10 23,759,530 Actuarial Loss 10/1/2023 15 6,096,822				3,190,695 634,039	

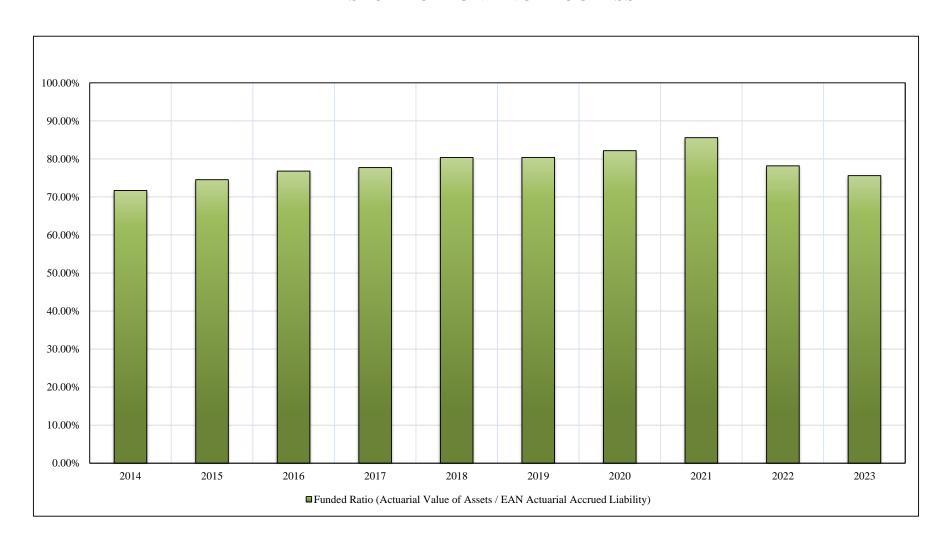
29,856,352

3,824,734

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2022	\$24,992,619
(2) Expected UAAL as of October 1, 2023	23,759,530
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	2,733,821
Salary Increases	2,010,460
Active Decrements	958,807
Inactive Mortality	313,257
New Entrants	105,243
Other	(24,766)
Increase in UAAL due to (Gain)/Loss	6,096,822
Assumption Changes	0
(4) Actual UAAL as of October 1, 2023	\$29,856,352

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: PubS.H-2010 (Below Median) for Employees, set forward one year.

Male: PubS.H-2010 (Below Median) for Employees, set forward one year.

Healthy Retiree Lives:

Female: PubS.H-2010 for Healthy Retirees, set forward one year.

Male: PubS.H-2010 for Healthy Retirees, set forward one year.

Beneficiary Lives:

Female: PubG.H-2010 for Healthy Retirees.

Male: PubG.H-2010 for Healthy Retirees, set back one year.

Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates for healthy lives are projected generationally with Mortality Improvement Scale MP-2018. We feel this assumption sufficiently accommodates future mortality improvements.

The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2021 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

7.25% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

None.

Interest Rate

Payroll Growth

Salary Increases

Sulary Scale	
Service	Rate
<1	15.00%
1	6.50%
2-9	5.50%
10-20	4.50%
21-24	3.75%
25+	3.50%

This assumption was adopted by the Board, based on results of the May 8, 2022 Experience Study.

Normal Retirement

% Retiring During the

Year (10-24 Years of Service)

Age	Rate
52-56	25%
57+	100%

% Retiring During the Year

(>= 25 Years of Service)

Rate
55.0%
40.0%
35.0%
25.0%
50.0%
100.0%

This assumption was adopted by the Board, based on results of the May 8, 2022 Experience Study.

Early Retirement

Commencing with the earliest Retirement Age, Members are assumed to retire with an immediate subsidized benefit at the rate of 10% per year. This assumption was adopted by the Board, based on results of the May 8, 2022 Experience Study.

Termination Rate

% Terminating During the Year

Service	Rate
0-5	13.00%
6-10	4.00%
11-15	3.00%
16-25	2.00%
26+	0%

This assumption was adopted by the Board, based on results of the May 8, 2022 Experience Study.

Disability Rate

See table below for sample rates; 75% of disablements are assumed to be service related. This assumption was adopted by the Board, based on results of the May 8, 2022 Experience Study.

% Becoming Disabled

During the Year		
Age	Rate	
20	0.14%	
25	0.15%	
30	0.18%	
35	0.23%	
40	0.30%	
45	0.51%	
50	1.00%	

Partial Lump Sums

Administrative Expenses

Amortization Method

Funding Method

Asset Valuation Method

For valuation purposes, no future retirees are assumed to opt for a partial lump sum.

\$97,461 annually, based on the average of actual expenses incurred in the prior two fiscal years.

New UAAL amortization bases are amortized over 15 years; the amortization payment is subject to a minimum based on a 30-year amortization of the UAAL, if the UAAL is positive, in order to comply with Actuarial Standard of Practice No. 4.

Bases established prior to the valuation date are adjusted proportionally to match the Expected Unfunded Actuarial Accrued Liability as of the valuation date, in order to align prior year bases with the portion of the current year UAAL associated with prior year sources.

Entry Age Normal Actuarial Cost Method. The following loads are applied for determining the minimum required contribution:

Interest - A half year, based on current 7.25% assumption.

Salary - None.

Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 5-year average Market Value return. It is possible that over time this technique will produce an insignificant bias above or below Market Value.

Low-Default-Risk Obligation Measure

Based on the Entry Age Normal Actuarial Cost Method and an interest rate of 4.87% per year compounded annually, net of investment related expenses. This rate is consistent with the Yield to Maturity of the S&P Municipal Bond 20-Year High Grade Rate Index as of September 30, 2023. All other assumptions for the Low-Default-Risk Obligation Measure are consistent with the assumptions shown in this section unless otherwise noted.

GLOSSARY

Actuarial Value of Assets is the asset value used in the valuation to determine contribution requirements. It represents the plan's Market Value of Assets (see below), with adjustments according to the plan's Actuarial Asset Method. These adjustments produce a "smoothed" value that is likely to be less volatile from year to year than the Market Value of Assets.

<u>Entry Age Normal Cost Method</u> - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

- (a) The normal cost accrual rate equals:
 - (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
 - (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.
- (b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
- (c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
- (d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

<u>Market Value of Assets</u> is the fair market value of plan assets as of the valuation date. This amount may be adjusted to produce an Actuarial Value of Assets for plan funding purposes.

<u>Normal (Current Year's) Cost</u> is the current year's cost for benefits yet to be funded. Under the Entry Age Normal cost method, it is determined for each participant as the present value of future benefits, determined as of the Member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.

<u>Payroll Under Assumed Ret. Age</u> is the projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members, excluding any Members who are assumed to retire with 100% probability on the valuation date.

<u>Projected Annual Payroll</u> is the projected annual rate of pay for the fiscal year following the fiscal year beginning on the valuation date of all covered Members.

<u>Present Value of Benefits</u> is the single sum value on the valuation date of all future benefits to be paid to current plan participants.

<u>Total Annual Payroll</u> is the projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members.

<u>Total Required Contribution</u> is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

<u>Unfunded Actuarial Accrued Liability (UAAL)</u> is the difference between the actuarial accrued liability (described above) and the Actuarial Value of Assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- <u>Investment Return</u>: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- <u>Salary Increases</u>: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled "Plan Maturity Measures and Other Risk Metrics". Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 127.7% on October 1, 2013 to 115.4% on October 1, 2023, indicating that the plan has been maturing during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 56.6%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 68.4% on October 1, 2013 to 75.6% on October 1, 2023.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from 1.0% on October 1, 2013 to -0.9% on October 1, 2023. The current Net Cash Flow Ratio of -0.9% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

Low Default-Risk Obligation Measure

ASOP No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, was revised as of December 2021 to include a "low-default-risk obligation measure" (LDROM). This liability measure is consistent with the determination of the actuarial accrued liability shown on page 11 in terms of member data, plan provisions, and assumptions/methods, under the Entry Age Normal Cost Method, except that the interest rate is tied to low-default-risk fixed income securities. The S&P Municipal Bond 20 Year High Grade Rate Index (daily rate closest to, but not later than, the measurement date) was selected to represent a current market rate of low risk but longer-term investments that could be included in a low-risk asset portfolio. The interest rate used in this valuation was 4.87%, resulting in an LDROM of \$162,258,762. The LDROM should not be considered the "correct" liability measurement; it simply shows a possible outcome if the Board elected to hold a very low risk asset portfolio. The Board actually invests the pension plan's contributions in a diversified portfolio of stocks and bonds and other investments with the objective of maximizing investment returns at a reasonable level of risk. Consequently, the difference between the plan's Actuarial Accrued Liability disclosed earlier in this section and the LDROM can be thought of as representing the expected taxpayer savings from investing in the plan's diversified portfolio compared to investing only in high quality bonds.

The actuarial valuation reports the funded status and develops contributions based on the expected return of the plan's investment portfolio. If instead, the plan switched to investing exclusively in high quality bonds, the LDROM illustrates that reported funded status would be lower (which also implies that the Actuarially Determined Contributions would be higher), perhaps significantly. Unnecessarily high contribution requirements in the near term may not be affordable and could imperil plan sustainability and benefit security.

It is important to note that the actuary has identified the risks above as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	10/1/2023	10/1/2022	10/1/2018	10/1/2013
Support Ratio				
Total Actives Total Inactives ¹ Actives / Inactives ¹	180 156 115.4%	188 152 123.7%	155 135 114.8%	143 112 127.7%
Asset Volatility Ratio				
Market Value of Assets (MVA) Total Annual Payroll MVA / Total Annual Payroll	83,675,003 15,367,589 544.5%	77,186,078 14,648,944 526.9%	73,797,839 9,896,055 745.7%	53,616,098 8,269,526 648.4%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability Total Accrued Liability (EAN) Inactive AL / Total AL	69,235,463 122,363,571 56.6%	64,588,502 114,522,387 56.4%	54,354,914 92,094,154 59.0%	42,731,773 73,891,366 57.8%
Funded Ratio				
Actuarial Value of Assets (AVA) Total Accrued Liability (EAN) AVA / Total Accrued Liability (EAN)	92,507,219 122,363,571 75.6%	89,529,768 114,522,387 78.2%	74,025,974 92,094,154 80.4%	50,545,160 73,891,366 68.4%
Net Cash Flow Ratio				
Net Cash Flow ² Market Value of Assets (MVA) Ratio	(744,820) 83,675,003 -0.9%	(398,992) 77,186,078 -0.5%	(640,446) 73,797,839 -0.9%	510,151 53,616,098 1.0%

¹ Excludes terminated participants awaiting a refund of member contributions.

² Determined as total contributions minus benefit payments and administrative expenses.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During <u>Fiscal Year</u>	<u>Amount</u>	Increase from Previous Year
1998	370,841.81	%
1999	389,759.63	5.1%
2000	382,862.87	-1.8%
2001	403,077.56	5.3%
2002	442,447.29	9.8%
2003	506,930.80	14.6%
2004	526,765.89	3.9%
2005	544,392.80	3.3%
2006	569,421.43	4.6%
2007	544,392.80	-4.4%
2008	544,392.80	0.0%
2009	514,489.49	-5.5%
2010	448,284.61	-12.9%
2011	429,239.39	-4.2%
2012	412,295.01	-3.9%
2013	413,332.50	0.3%
2014	440,294.47	6.5%
2015	471,519.76	7.1%
2016	516,594.42	9.6%
2017	530,025.97	2.6%
2018	584,333.68	10.2%
2019	636,601.20	8.9%
2020	688,439.72	8.1%
2021	683,979.85	-0.6%
2022	763,083.58	11.6%
2023	877,590.45	15.0%

STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2023

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Checking Account	501,366.18	501,366.18
Money Market	1,386,484.61	1,386,484.61
Wolley Warket	1,500,404.01	1,300,404.01
Total Cash and Equivalents	1,887,850.79	1,887,850.79
Receivables:		
Additional City Contributions	222,129.95	222,129.95
From Broker for Investments Sold	74,553.73	74,553.73
Investment Income	123,293.89	123,293.89
	440.0== ==	440.0== ==
Total Receivable	419,977.57	419,977.57
Investments:		
U. S. Bonds and Bills	6,529,238.48	6,089,849.90
Federal Agency Guaranteed Securities	6,066,669.68	5,459,667.14
Corporate Bonds	15,375,322.81	14,330,159.20
Stocks	11,420,406.56	12,616,490.77
Mutual Funds:		
Equity	21,686,532.27	33,258,073.24
Pooled/Common/Commingled Funds:		
Equity	3,705,175.52	5,789,036.63
Real Estate	3,167,637.48	4,233,458.89
Total Investments	67,950,982.80	81,776,735.77
Total Assets	70,258,811.16	84,084,564.13
LIABILITIES		
Payables:		
Lump Sum Death Benefit	198,450.69	198,450.69
Investment Expenses	57,796.18	57,796.18
Administrative Expenses	4,913.50	4,913.50
To Broker for Investments Purchased	148,400.86	148,400.86
10 210101 101 111 00011101100 1 010111000	1 10, 10 010 0	110,100.00
Total Liabilities	409,561.23	409,561.23
NET POSITION RESTRICTED FOR PENSIONS	69,849,249.93	83,675,002.90

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2023

Market Value Basis

ADDITIONS
Contributions:

Member	1,185,776.73
Buy-Back	39,638.00
City	2,850,399.95
State	877,590.45

Total Contributions 4,953,405.13

Investment Income:

Net Realized Gain (Loss) 636,779.85 Unrealized Gain (Loss) 5,468,493.20 Net Increase in Fair Value of Investments 6,105,273.05 Interest & Dividends 1,524,508.16 Less Investment Expense¹ (396,037.10)

Net Investment Income 7,233,744.11

Total Additions 12,187,149.24

DEDUCTIONS

Distributions to Members:

Benefit Payments	5,088,964.45
Lump Sum DROP Distributions	96,187.01
Lump Sum Death Benefit	248,063.36
Lump Sum PLOP Distributions	0.00
Refunds of Member Contributions	159,522.70

Total Distributions 5,592,737.52

Administrative Expense 105,487.30

Total Deductions 5,698,224.82

Net Increase in Net Position 6,488,924.42

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 77,186,078.48

End of the Year 83,675,002.90

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION SEPTEMBER 30, 2023

Rate of Return¹

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past five years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End

09/30/201	9	3.14%		
09/30/202	20	9.04%		
09/30/202	21	19.91%		
09/30/202	22	-16.74%		
09/30/202	23	9.30%		
Annualized Rate of Return	For prior five (5) years:	4	4.18%	
(A) 10/01/20	022 Actuarial Assets:			\$89,529,768.26
(I) Net Inves	stment Income:			
2. Realize3. Unreali4. Change	and Dividends d Gain (Loss) zed Gain (Loss) in Actuarial Value nent Related Expenses Total	(-	1,524,508.16 636,779.85 5,468,493.20 3,511,473.37) (396,037.10)	3,722,270.74
(B) 10/01/20)23 Actuarial Assets, excl	luding Shortfall Contributi	ion:	\$92,285,089.36
Actuarial Asset Rate of Retu	arn = 2I/(A+B-I), based on	n Unlimited Actuarial Ass	sets:	4.18%
10/01/202	23 Limited Actuarial Asse	ets, including Shortfall Cor	ntribution	\$92,507,219.31
10/01/202	3 Market Value of Assets	s, including Shortfall Con	ntribution	\$83,675,002.90
Actuarial Asset Rate of Retu	ırn, based on Limited Act	tuarial Assets:		4.18%
Actuarial Gain/(Loss) due to	Investment Return (Limit	ited Actuarial Asset Basis	3)	(\$2,733,820.85)
¹ Market Value Basis, net o	f investment related expen	nses.		

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS **SEPTEMBER 30, 2023 Actuarial Asset Basis**

REVENUE	S	
Contributions:		
Member	1,185,776.73	
Buy-Back	39,638.00	
City	2,850,399.95	
State	877,590.45	
Total Contributions		4,953,405.13
Earnings from Investments:		
Interest & Dividends	1,524,508.16	
Net Realized Gain (Loss)	636,779.85	
Unrealized Gain (Loss)	5,468,493.20	
Change in Actuarial Value	(3,511,473.37)	
Total Earnings and Investment Gains		4,118,307.84
EXPENDITUI	RES	
Distributions to Members:		
Benefit Payments	5,088,964.45	
Lump Sum DROP Distributions	96,187.01	
Lump Sum Death Benefit	248,063.36	
Lump Sum PLOP Distributions	0.00	
Refunds of Member Contributions	159,522.70	
Total Distributions		5,592,737.52
Expenses:		
Investment related ¹	396,037.10	
Administrative	105,487.30	
Total Expenses		501,524.40
Change in Net Assets for the Year		2,977,451.05

Net Assets Beginning of the Year

Net Assets End of the Year²

89,529,768.26

92,507,219.31

¹Investment related expenses include investment advisory, custodial and performance monitoring fees. ²Net Assets may be limited for actuarial consideration.

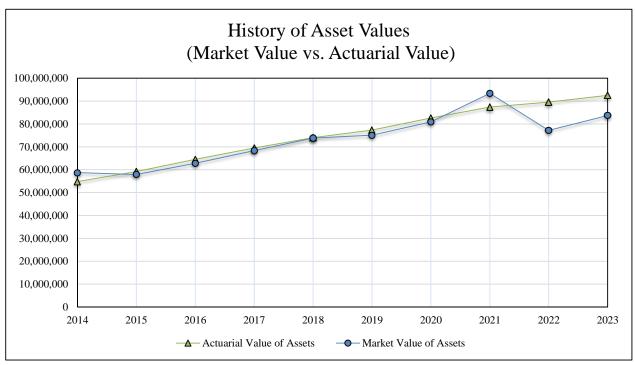
DEFERRED RETIREMENT OPTION PLAN ACTIVITY October 1, 2022 to September 30, 2023

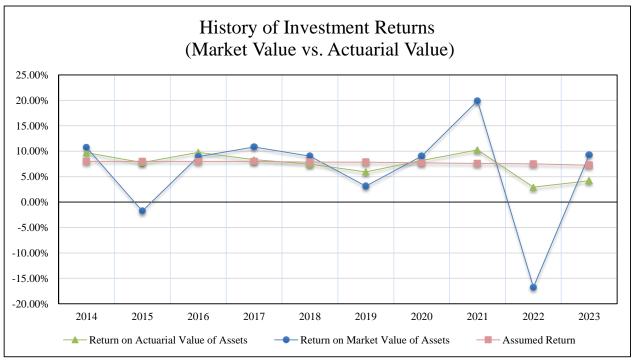
Beginning of the Year Balance	1,550,608.85
Plus Additions	776,327.37
Investment Return Earned	118,429.66
Less Distributions	(96,187.01)
End of the Year Balance	2,349,178.87

RECONCILIATION OF CITY SHORTFALL/(PREPAID) CONTRIBUTION FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2023

(1)	City and State Required Contribution Rate	29.17%
(2)	Pensionable Payroll Derived from Member Contributions	\$14,822,209.13
(3)	City and State Required Contribution (1) x (2)	4,323,638.40
(4)	Less Allowable State Contribution	(877,590.45)
(5)	Equals Required City Contribution for Fiscal 2023	3,446,047.95
(6)	Less 2022 Funding Standard Account Credit Balance	(595,648.00)
(7)	Less Actual City Contributions	(2,628,270.00)
(8)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2023	\$222,129.95

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





STATISTICAL DATA

	10/1/2023	10/1/2022	10/1/2021	10/1/2020
Actives				
Number	180	188	167	175
Average Current Age	36.8	36.4	37.2	37.0
Average Age at Employment	27.4	27.5	27.2	27.0
Average Past Service	9.4	8.9	10.0	10.0
Average Annual Salary	\$85,375	\$77,920	\$68,625	\$67,193
Service Retirees				
Number	108	106	107	97
Average Current Age	66.6	66.3	66.1	66.8
Average Annual Benefit	\$42,597	\$42,502	\$41,928	\$41,157
DROP Retirees				
Number	13	10	7	11
Average Current Age	54.0	53.4	52.5	55.0
Average Annual Benefit	\$64,861	\$58,917	\$53,341	\$54,879
<u>Beneficiaries</u>				
Number	21	22	22	16
Average Current Age	71.3	69.2	68.2	67.1
Average Annual Benefit	\$18,623	\$19,584	\$20,062	\$18,282
Disability Retirees				
Number	5	4	4	5
Average Current Age	52.5	55.7	54.7	55.2
Average Annual Benefit	\$24,014	\$24,356	\$24,356	\$22,640
Terminated Vested				
Number	21	22	23	16
Average Current Age ¹	44.3	45.3	49.2	49.5
Average Annual Benefit 1	\$27,049	\$25,427	\$16,670	\$16,318

¹ The Average Current Age and Average Annual Benefit exclude participants awaiting a refund of contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19												0
20 - 24	6	7	1		2	1						17
25 - 29	1	10	4	4	4	7						30
30 - 34	5	5	3	5	6	13	3					40
35 - 39	1	4	2		1	9	7	4				28
40 - 44		1		1	2	1	4	4	6			19
45 - 49	1	1		1	1	1	2	2	8	2		19
50 - 54			1			1		5	5	8	1	21
55 - 59						1	1			3		5
60 - 64							1					1
65+												0
Total	14	28	11	11	16	34	18	15	19	13	1	180

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2022	188
b. Terminations	
i. Vested (partial or full) with deferred annuity	(1)
ii. Vested in refund of member contributions only	(2)
iii. Refund of member contributions or full lump sum distribution	(13)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	(1)
e. Retired	(1)
f. DROP	<u>(4)</u>
g. Continuing participants	166
h. New entrants / Rehires	14
i. Total active life participants in valuation	180

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving Benefits	DROP Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred <u>Annuity)</u>	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	106	10	22	4	10	12	164
Retired	4	(1)			(2)		1
DROP		4					4
Vested (Deferred Annuity)					1		1
Vested (Due Refund)						2	2
Hired/Terminated in Same Year						3	3
Death, With Survivor							0
Death, No Survivor	(2)						(2)
Disabled				1			1
Refund of Contributions						(4)	(4)
Rehires						(1)	(1)
Expired Annuities			(1)				(1)
Data Corrections							0
b. Number current valuation	108	13	21	5	9	12	168

SUMMARY OF CURRENT PLAN (Through Ordinance 2024-8)

CREDITED SERVICE Years and fractional parts of years of service with

the City as a Police Officer.

SALARY Total compensation for services rendered, including

overtime, but excluding special detail pay, bonuses and unused vacation and sick time, plus tax deferred,

tax sheltered and tax-exempt items of income.

Pensionable Overtime is limited to 300 hours per calendar year for benefits accrued after October 31,

2015.

AVERAGE FINAL COMPENSATION Average Salary during the best 5 years of the 10

years preceding termination.

NORMAL RETIREMENT

Eligibility Earlier of 1) Age 52 and 10 years of Credited

Service, or 2) 25 years of Credited

Service, regardless of age.

Benefit Amount 3.33% of Average Final Compensation times

Credited Service. For Members not within 5 years of Normal Retirement as of November 1, 2015, the

benefit accrual is 3.00% of Average Final Compensation for Credited Service earned after

October 31, 2015.

Form of Benefit Payable for life, with 120 monthly payments

guaranteed. Options available.

EARLY RETIREMENT

Eligibility Age 50 and 10 years of Credited Service.

Benefit Amount Accrued benefit, reduced 3% per year prior to

Normal Retirement.

SUPPLEMENTAL BENEFIT

Eligibility Normal and Early Retirees and their Joint Pensioners

or Beneficiaries, excluding vested terminated

persons.

Monthly Benefit Amount \$10.00 for each full year of Credited Service.

For Members not within 5 years of Normal Retirement as of November 1, 2015, Credited Service for the Supplemental Benefit ceases as of

October 31, 2015.

DISABILITY

Eligibility Service Incurred - Covered from Date of

Employment.

Non-Service Incurred - 10 years of Credited Service.

Benefit Benefit accrued to date of disability, but not less

than 42% of Average Final Compensation (Service Incurred), or 25% of Average Final Compensation

(Non-Service Incurred).

Duration Payable for life (with 10 year guarantee) or until

recovery (as determined by the Board). Optional

forms available.

PRE-RETIREMENT DEATH

(Non-Vested Members) Refund of Member contributions to designated

beneficiary.

(Vested Members) Accrued benefit payable at Member's otherwise

Early or Normal Retirement Date to beneficiary for

10 years.

VESTING (TERMINATION)

Less than 10 years of Service Refund of Member Contributions.

10 years or more Accrued benefit payable at otherwise Normal

Retirement Date, based upon Credited Service in place on the date or termination, or refund of Member Contributions in lieu of a future benefit.

CONTRIBUTIONS

Employee 8.00% of Salary.

Premium Tax 0.85% tax on casualty insurance premiums.

City Remaining amount necessary for payment of Normal

(current year's) cost plus any additional amount necessary to fund any past service liability as provided in Part VII of Chapter 112, Florida

Statutes.

DEFERRED RETIREMENT OPTION PLAN

Eligibility Satisfaction of Normal Retirement requirements.

Participation Not to exceed 60 months.

Rate of Return At member's election (may change method once

during DROP participation) either: a) 6.5% annual rate, or b) Net Investment Return (total return less brokerage commission, transaction costs and management fees) credited each fiscal quarter.

For Members not within 5 years of Normal

Retirement eligibility as of November 1, 2015, the net-of-fees earnings for DROP balances established

on or after November 1, 2015 is limited to a maximum of 3% and minimum of 1%.

Distribution Cash lump sum (options available) at termination of

employment.

BOARD OF TRUSTEES Two City residents appointed by the City Council,

two Police Officers elected by majority of covered members, and a fifth member elected by other 4 and appointed by City Council (as a ministerial duty).

SUPPLEMENTAL BENEFIT: CHAPTER 185 SHARE ACCOUNTS

Effective September 30, 2015, excess Premium tax monies received pursuant to Chapter 185, Florida Statutes will be allocated to individual Member (including DROP participants) share accounts based on years of Credited Service.

Investment Earnings Plan earnings, net of investment-related expenses.

Expenses

Based on expenses related to administration of the
Share Plan, debited against individual accounts on a

pro-rata basis.